Weekly COVID-19 Update in Montana (as of 5/6/2022)

This report is a weekly snapshot of COVID-19 activity in Montana. Data are analyzed based on information available as of May 6, 2022. Data are provisional and expected to change as more information is received.

Case Data

Table 1. Summary of COVID-19 Activity – Montana, as of 5/6/2022

	TOTAL	RECENT WEEK	PERCENT CHANGE FROM PREVIOUS WEEK
LABORATORY TESTS	**2,789,012**	**10,662**	**-25%**
DEATHS	**3,378**	**6**	**-92%****

**a COVID death reconciliation was sent out the week ending 4/22/22, resulting in an increase in the number of COVID deaths reported in recent weeks

Figure 1. COVID-19 Cases and Hospitalizations over Time – Montana, as of 5/6/2022

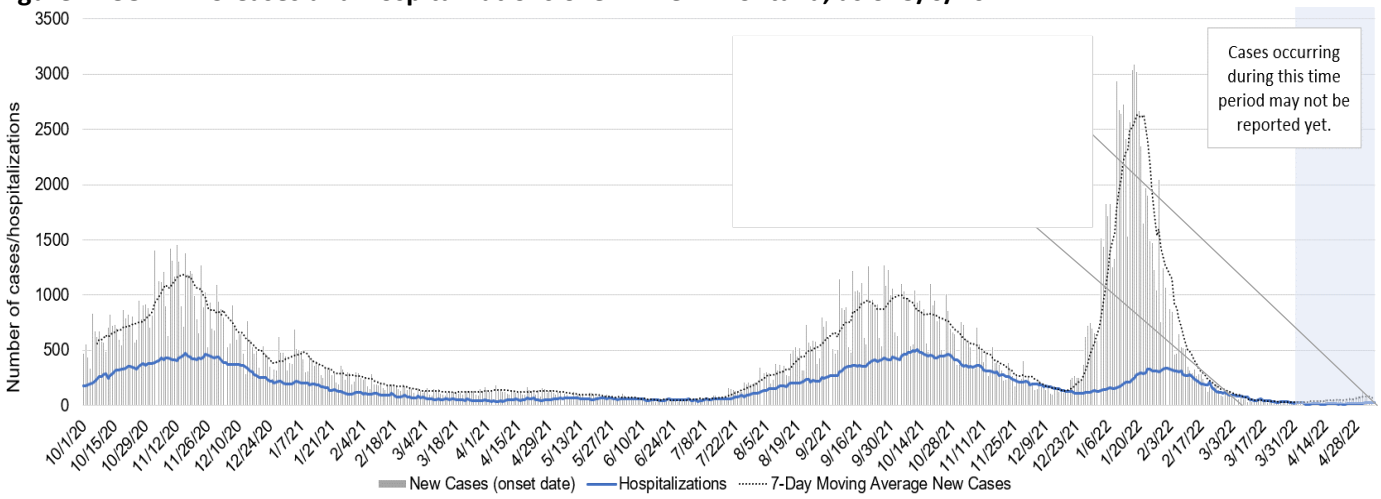


Figure 2: Status of Acute Care and ICU Beds – Hospitals in Montana, 4/27-5/10 2022

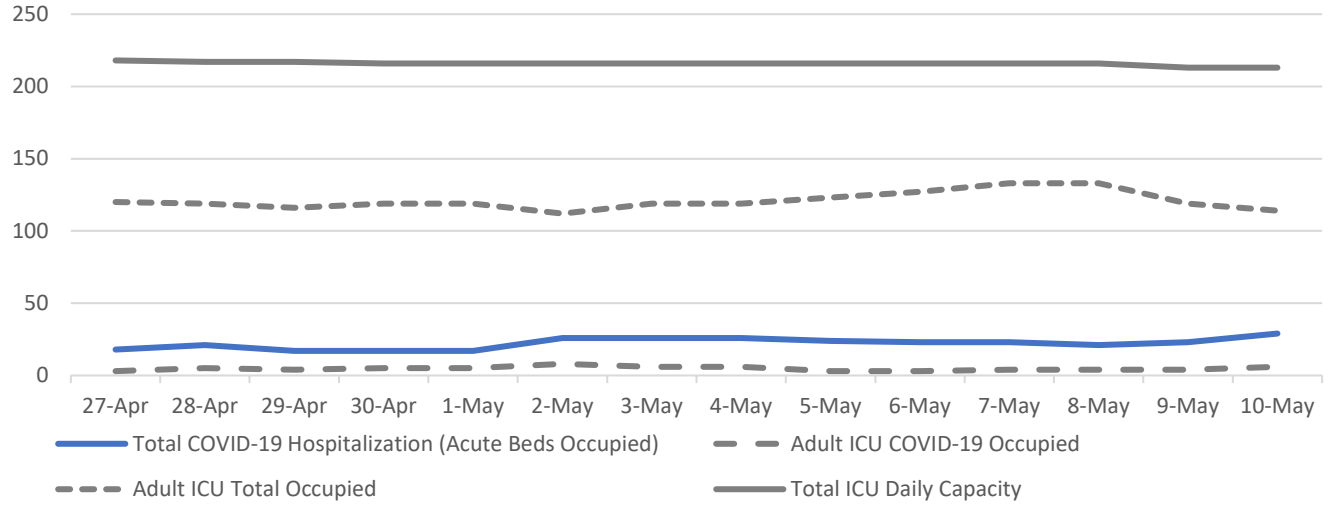
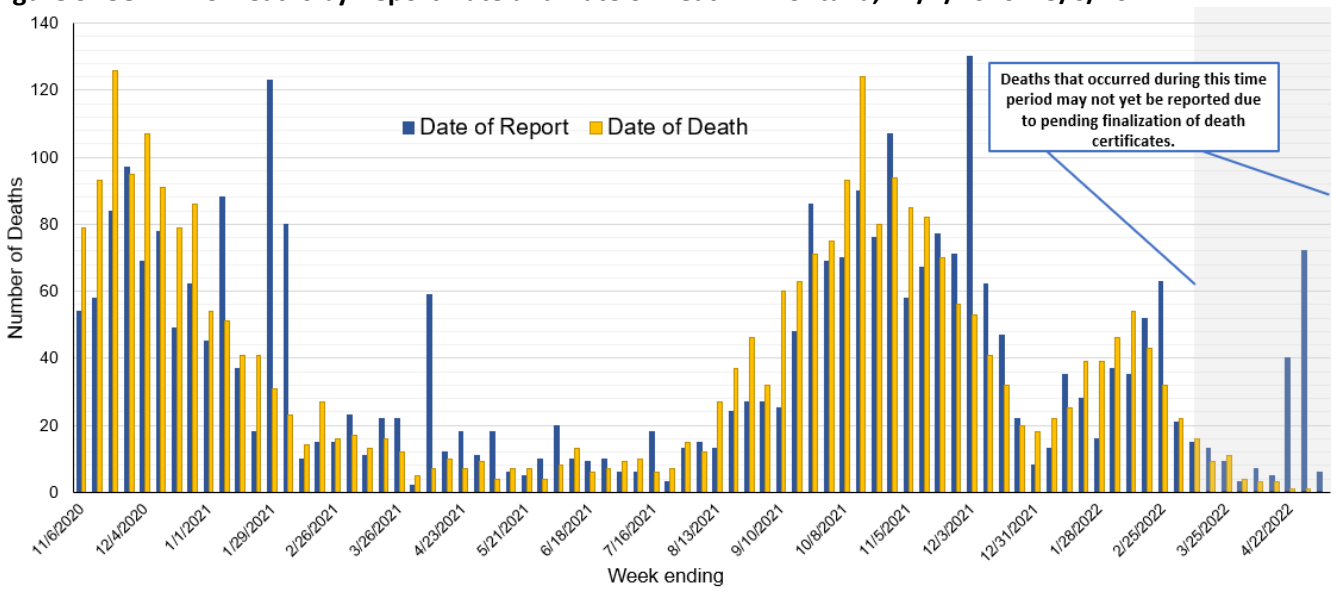


Figure 3. COVID-19 Deaths by Report Date and Date of Death – Montana, 11/1/2020 – 5/6/2022



Vaccine Data

Montana began vaccinating individuals in mid-December 2020 with a phased process: Phase 1A on December 14, 2020, Phase 1B on January 19, 2021, and Phase 1B+ on March 8, 2021. Vaccinations were opened to all Montanans age 16+ on April 1, 2021 and expanded to all Montanans age 12+ on May 10th, 2021. Most recently, the Pfizer vaccine was approved for the 5-11 year old age group on October 29th, 2021. To date, 1,463,189 doses have been given across the state and 55% of the eligible population is considered fully vaccinated (table 2).

Table 2: COVID-19 Vaccine Doses Administered for the 5 and older population – Montana, as of 5/6/2022

	NUMBER	PERCENT OF ELIGIBLE POPULATION	WEEK ENDING 4/22	WEEK ENDING 4/29	WEEK ENDING 5/6*
TOTAL DOSES ADMINISTERED	**1,463,189**		8,055	7,061	**5,476**
DOSE 1 ADMINISTERED	**634,421**	**62%**	571	535	**449**
FULLY VACCINATED INDIVIDUALS	**563,850**	**55%**	568	598	**437**

*the data for the most recent week are preliminary and are expected to be an underestimate of the doses administered during the week, due to a reporting lag.

Figure 4. COVID-19 Vaccine Doses Administered by Week, 5+ Years – Montana, as of 5/6/2022

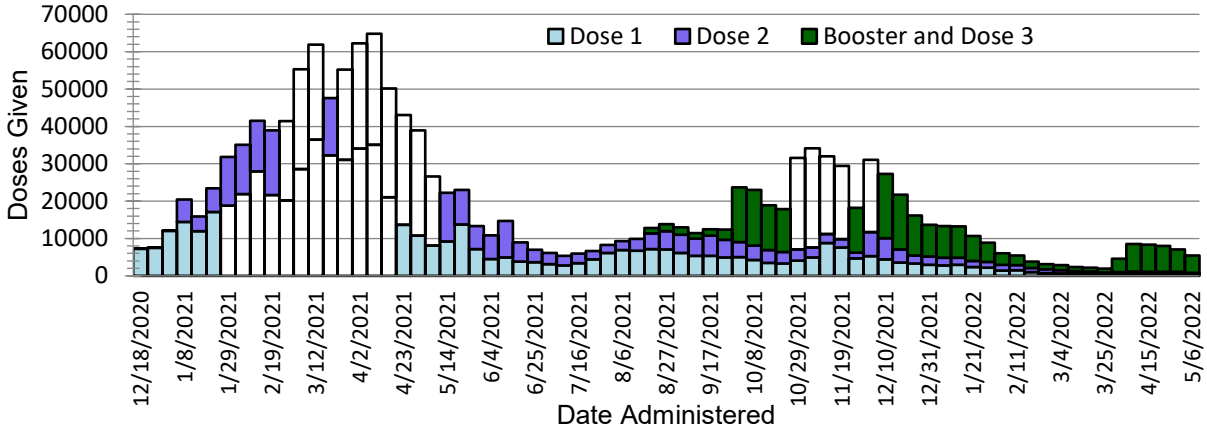
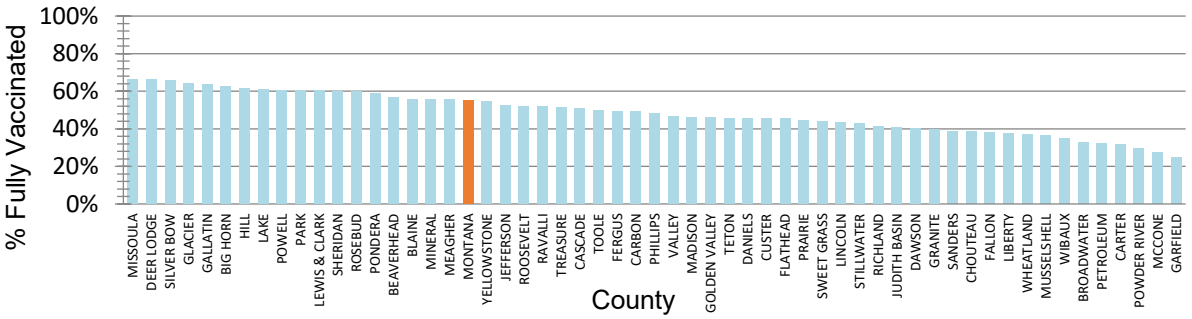


Figure 5. Percent of Eligible Montanans (5+ years) Fully Vaccinated by County – Montana, 5/6/2022



Variant and Breakthrough Cases

Figure 6 displays the number of Montana samples sequenced by week. Figure 7 displays the percentage of the most common SARS-CoV-2 lineages detected out of all Montana samples sequenced by week. There have been 16,674 samples from Montana that have been sequenced with their lineages reported to GISAID since September 2020. **Please note the relatively small number of samples sequenced in recent weeks limits interpretation of the available variant sequencing data.**

As of May 10, there have been 4,186 cases across Montana infected with Omicron variants—4,104 (98%) infected with BA.1, 75 (2%) infected with BA.2, and 7 (<1%) infected with BA.2.12.1. DPHHS is monitoring sublineages of the Omicron variant, including BA.2 (pink, below) which was first detected in Montana on January 30, 2022, and BA.2.12.1 (gold, below) which was first identified in Montana on April 19, 2022. In the past four weeks, 37 sequences have been reported to GISAID—26 (70%) BA.2, 7 (19%) BA.2.12.1, and 4 (11%) BA.1. Please note only 2 positive samples were collected the week ending May 7, 2022 that were sequenced and reported to GISAID, one was BA.2 and one was BA.2.12.1. There have been no BA.4 or BA.5 variants detected in specimens from Montana at this time.

Figure 6. Number of COVID-19 samples sequenced by collection date, Montana 5/7/2022

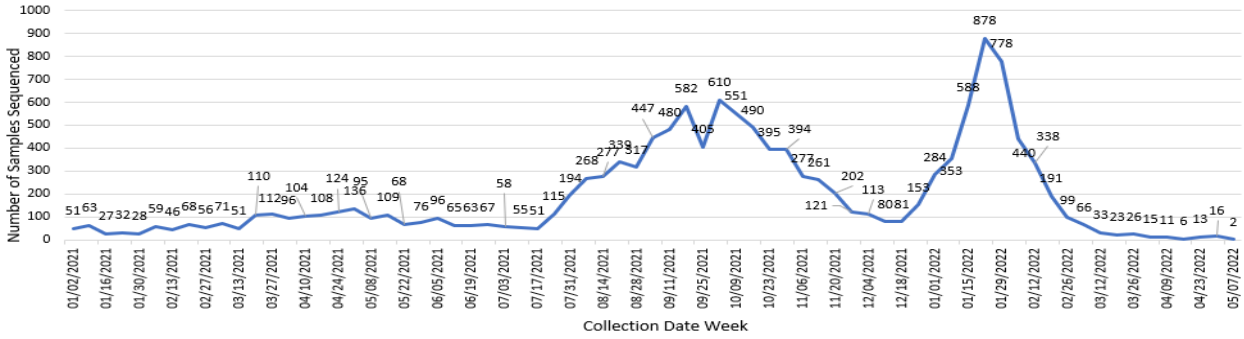
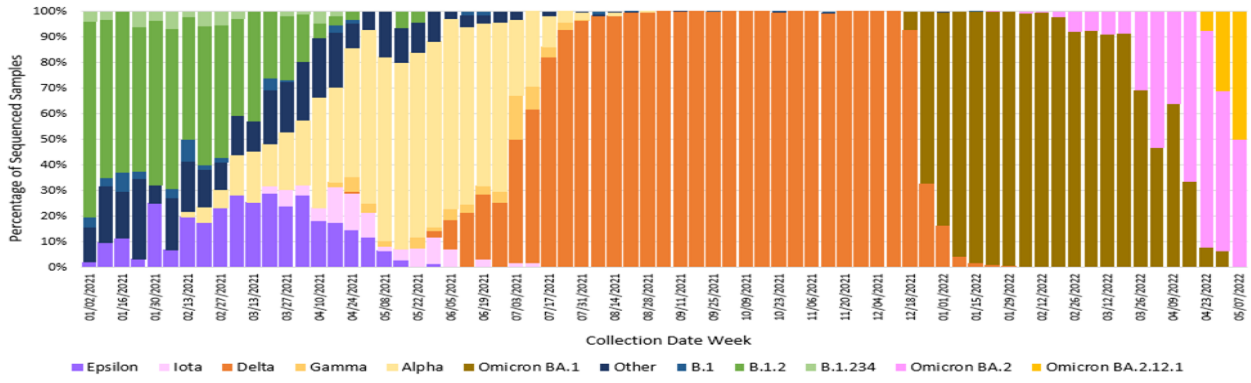


Figure 7. Percent of COVID-19 variants in sequenced samples by collection date, Montana 5/7/2022



A breakthrough COVID-19 infection is defined as a positive SARS-CoV-2 specimen collected ≥14 days after completing the primary COVID-19 vaccine series of an FDA-authorized COVID-19 vaccine. Studies show that protection from COVID vaccination decreases over time; in response, the CDC has recommended booster doses for eligible populations to protect against waning immunity. As of May 10th, 2022, Montana reports 44,037 cases of confirmed breakthrough disease, which includes 1,468 hospitalizations and 423 deaths. CDC data from February 2022 show that unvaccinated individuals aged 12 years and older were more than 3 times more likely to become infected with COVID-19, compared to fully vaccinated individuals in the same age group with a booster dose. Additionally, unvaccinated individuals 12 and older had 20 times the risk of dying from COVID-19 compared to fully vaccinated individuals in the same age group with booster doses.[1]

Hospitalizations and Deaths and Vaccination Status

COVID-19-related hospitalizations and deaths were analyzed between **April 1, 2021 and May 6, 2022** to review vaccination status. Since the beginning of April 2021, 79% of Montanans who were hospitalized and 76% of those who died were unvaccinated at the time of infection (Table 3). Of the 7,090 individuals who were hospitalized during this time period, 137 (2%) were <18 years old, 962 (14%) were 18 to 44 years old, 2,311 (33%) were 45 to 64 years old and 3,680 (52%) were ≥65 years old.

Additionally, COVID-19-related hospitalization and death data from **March 12– May 6, 2022** (last 8 weeks) were analyzed to review vaccination status. Fifty-four percent of Montanans who were hospitalized and 47% of those who died had not received a COVID-19 vaccine (Table 4)†. Of the 121 individuals who were hospitalized during this time period, 6 (5%) were <18 years old, 18 (15%) were 18 to 44 years old, 27 (22%) were 45 to 64 years old and 70 (58%) were ≥65 years old.

Table 3. Vaccination status of COVID-19 hospitalizations and deaths – April 1, 2021 to May 6, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	**7,090**	**1,784**
UNVACCINATED	5,626 (79%)	1,362 (76%)
VACCINATED (BREAKTHROUGH CASE)	1,464 (21%)	422 (24%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**<1-102 (63)**	**<1-103 (71)**
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**7-103 (73)**	**20-101 (80)**

Table 4. Vaccination status of COVID-19 hospitalizations and deaths – March 12 to May 6, 2022

	HOSPITALIZATIONS	DEATHS
TOTAL REPORTED	**121**	**32**
UNVACCINATED	65 (54%)	15 (47%)
VACCINATED (BREAKTHROUGH CASE)	56 (46%)	17 (53%)
UNVACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**<1-95 (70)**	**66-93 (76)**
VACCINATED AGE RANGE IN YEARS (MEDIAN AGE)	**19-97 (71)**	**39-94 (78)**

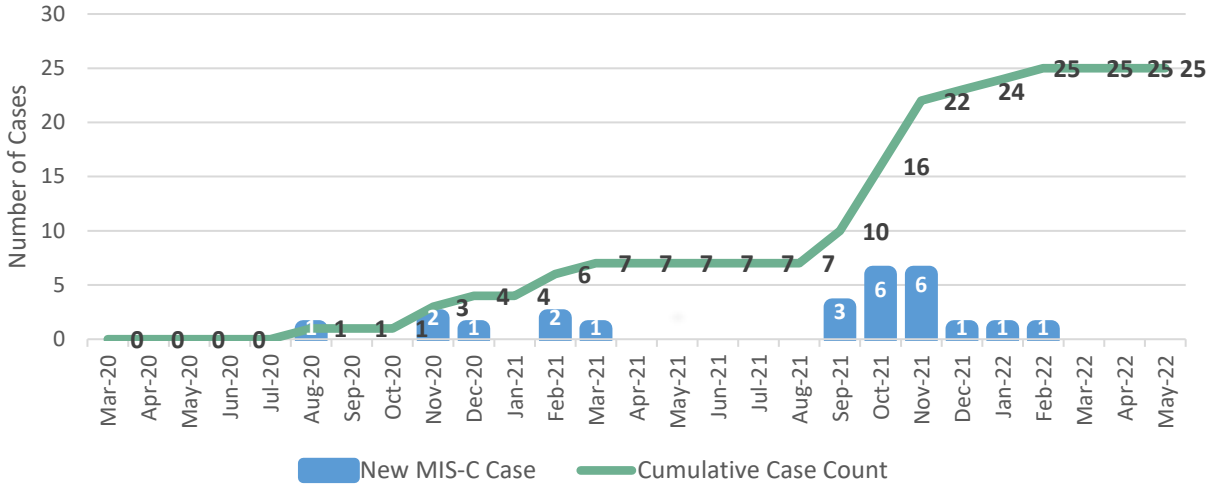
†The analysis of hospitalizations and deaths by vaccination status does not include data on booster doses. Booster doses are recommended by the CDC and have been shown to improve protection against hospitalization and death from COVID-19[1].

[1] CDC – COVID Data Tracker – Rates of COVID-19 Cases and Deaths by Vaccination Status. https://covid.cdc.gov/covid-data-tracker/#rates-by-vaccine-status. May 9, 2022.

Multisystem Inflammatory Syndrome in Children (MIS-C)

As of May 6, 2022, there have been a total of 25 cases of multisystem inflammatory syndrome in children, or MIS-C, reported in Montana. There have been no deaths. Ages range from less than 1 year to 20 years old; median is 9 years. Eleven cases were female, 14 were male. Cases are from 13 counties around Montana. The first case of MIS-C was reported in August 2020; 18 of the 25 cases have been reported since September 2021 (Figure 8).

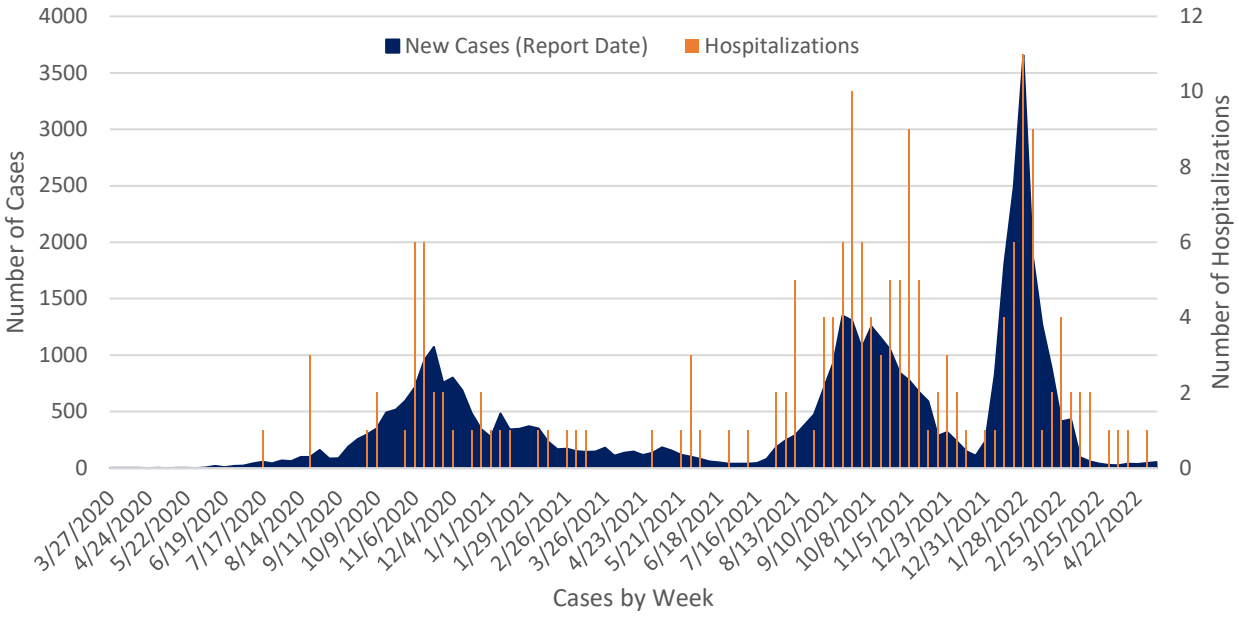
Figure 8. Montana MIS-C Cases by Month of Onset, March 2020 – May 2022



Cases and Hospitalizations Associated with COVID-19 Among Children

To date, there have been 43,088 children <18 years old in Montana diagnosed with COVID-19. Of those, 173 (<1%) have been hospitalized. Case rates among children follow a similar pattern to COVID-19 cases among all age groups (see Figure 1 for comparison) and increased sharply during the recent Omicron surge (Figure 9). There were 53 cases of COVID-19 in children reported during the week of April 30 – May 6, 2022, which is a 18% increase in cases among that age group compared to the previous week. No hospitalizations in in children reported that week.

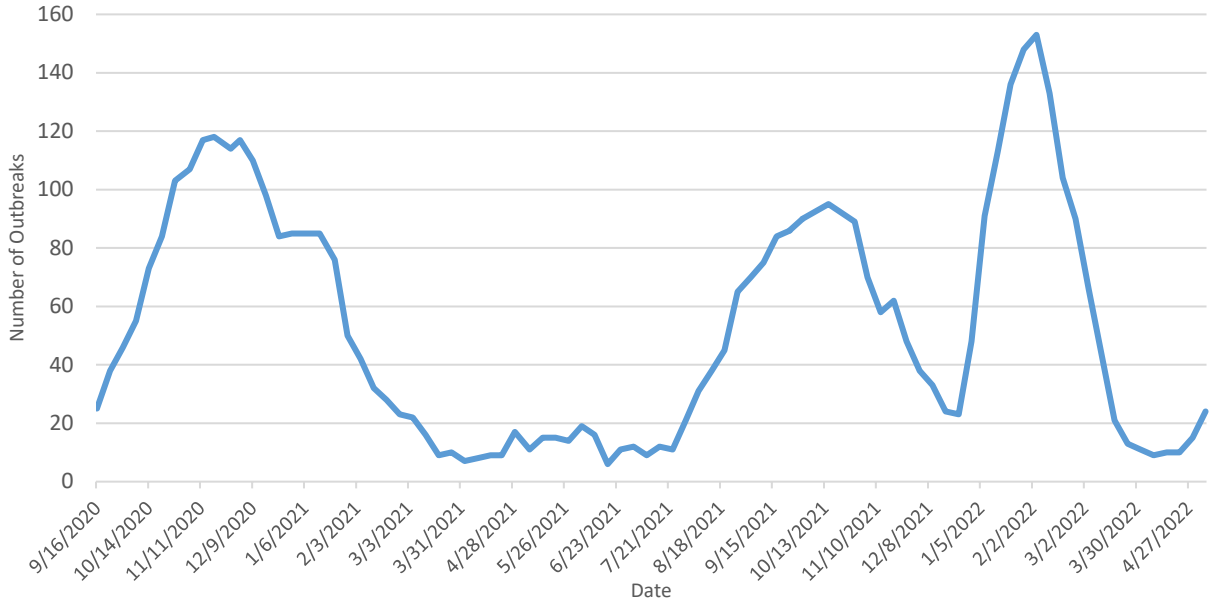
Figure 9. COVID-19 Cases and Hospitalizations by Week, March 2020 – May 6, 2022, Children <18



Assisted Living Facilitiy and Long Term Care Facility Cases and Hospitalizations

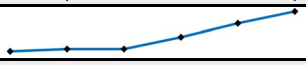
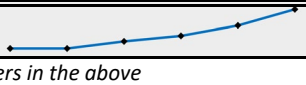
There are 71 long-term care facilities (LTCFs) and 211 assisted living facilities (ALFs) in Montana. As of May 6, 2022, there have been 10,953 cases associated with ALFs and LTCFs since the beginng of the pandemic, which compromises 4% of the total number of COVID-19 cases Montana has reported. There have been 650 COVID-related deaths associated with ALFs and LTCFs in Montana, which accounts for 19% of the COVID-related deaths that Montana has reported since the beginning of the pandemic. There are 25 facilities that are currently responding to a COVID outbreak, meaning they have identified a case of COVID-19 in a resident or staff member within the last 14 days (Figure 10).

Figure 10. Montana ALF and LTCF Outbreaks by Week, September 2020-May 2022



Reported COVID-19 Cases by County with Trendline – Montana, past 6 weeks

County	1 Apr	8 Apr	15 Apr	22 Apr	29 Apr	6 May	change from previous week*	Trendline
Beaverhead	5	0	0	2	2	1	-1	
Big Horn	2	0	5	5	4	7	3	
Blaine	2	0	1	3	2	4	2	
Broadwater	0	1	1	1	1	5	4	
Carbon	1	4	8	8	8	6	-2	
Carter	0	0	0	1	0	0	0	
Cascade	13	22	16	18	45	14	-31	
Chouteau	7	3	0	1	1	0	-1	
Custer	3	0	4	0	2	3	1	
Daniels	0	0	0	0	0	0	0	
Dawson	1	0	1	1	10	6	-4	
Deer Lodge	2	2	3	2	0	3	3	
Fallon	1	0	0	1	1	0	-1	
Fergus	3	1	1	1	0	2	2	
Flathead	16	15	16	26	45	86	41	
Gallatin	34	45	41	64	117	139	22	
Garfield	0	0	0	0	0	0	0	
Glacier	0	2	3	1	5	17	12	
Golden Valley	0	0	0	0	0	0	0	
Granite	0	0	0	1	2	0	-2	
Hill	2	2	3	7	1	3	2	
Jefferson	2	3	2	2	0	5	5	
Judith Basin	1	0	1	0	1	1	0	
Lake	9	3	3	5	12	19	7	
Lewis and Clark	11	18	26	20	25	35	10	
Liberty	1	0	1	0	0	0	0	
Lincoln	3	4	6	21	13	9	-4	
Madison	1	1	0	3	0	8	8	
McCone	0	0	0	0	0	0	0	
Meagher	0	0	0	0	0	0	0	

Missoula	40	28	66	82	77	109	32	
Park	5	6	6	11	17	22	5	
Phillips	0	0	0	0	0	0	0	
Powder River	1	0	0	4	3	1	-2	
Prairie	0	1	0	0	0	0	0	
Richland	4	4	0	0	2	4	2	
Rosebud	1	1	1	0	0	2	2	
Sheridan	0	0	0	1	0	0	0	
Stillwater	2	2	2	4	2	0	-2	
Teton	1	2	2	1	1	2	1	
Treasure	0	0	0	0	0	0	0	
Wheatland	0	0	2	0	0	0	0	
Yellowstone	24	34	60	33	37	80	43	
MONTANA	**227**	**227**	**300**	**360**	**467**	**638**	**171**	

†Note: Data are based on the date of report into the Montana Infectious Disease Information System (MIDIS). Underlined numbers in the above table reflect adjusted counts and may include cases diagnosed but not reported in earlier time frames. These adjustments result from local and state data reconciliation efforts, conducted to ensure accurate data.

County name	Eligible population 5+	Dose 1	Dose 2	Dose 3	Fully Immunized	Total Doses Administered	Percent eligible with first dose (5+)	Percent Fully Vaccinated (5+)
BEAVERHEAD	9,091	5,501	4,443	2,842	5,134	12,786	61%	56%
BIG HORN	11,975	8,274	7,145	3,017	7,520	18,436	69%	63%
BLAINE	6,044	3,762	3,157	1,687	3,369	8,606	62%	56%
BROADWATER	6,092	2,382	1,757	1,077	1,998	5,216	39%	33%
CARBON	10,476	5,612	4,812	2,935	5,166	13,359	54%	49%
CARTER	1,141	380	336	187	358	903	33%	31%
CASCADE	76,124	43,222	34,426	20,266	38,533	97,914	57%	51%
CHOUTEAU	5,430	2,246	1,902	1,450	2,090	5,598	41%	38%
CUSTER	10,692	5,402	4,368	2,553	4,881	12,323	51%	46%
DANIELS	1,559	745	656	373	712	1,774	48%	46%
DAWSON	8,071	3,560	2,936	1,760	3,249	8,256	44%	40%
DEER LODGE	8,887	6,387	5,295	3,739	5,874	15,421	72%	66%
FALLON	2,646	1,088	960	506	1,010	2,554	41%	38%
FERGUS	10,495	5,512	4,797	3,158	5,198	13,467	53%	50%
FLATHEAD	99,993	52,263	41,085	25,487	45,422	118,835	52%	45%
GALLATIN	110,900	83,412	64,158	38,213	70,431	185,783	75%	64%
GARFIELD	1,188	319	253	108	296	680	27%	25%
GLACIER	12,447	10,534	7,390	3,614	7,953	21,538	85%	64%
GOLDEN VALLEY	788	389	330	183	362	902	49%	46%
GRANITE	3,218	1,459	1,173	711	1,279	3,343	45%	40%
HILL	14,914	9,940	7,742	4,452	9,134	22,134	67%	61%
JEFFERSON	11,819	6,754	5,751	3,813	6,164	16,318	57%	52%
JUDITH BASIN	1,880	809	696	461	760	1,966	43%	40%
LAKE	29,280	20,162	16,643	10,298	17,882	47,103	69%	61%
LEWIS & CLARK	66,257	45,342	37,130	24,392	40,017	106,864	68%	60%
LIBERTY	2,234	860	734	521	835	2,115	38%	37%
LINCOLN	19,480	9,499	7,714	4,925	8,425	22,138	49%	43%
MADISON	8,589	4,422	3,516	2,346	3,953	10,284	51%	46%
MCCONE	1,562	453	422	256	431	1,131	29%	28%
MEAGHER	1,726	1,015	872	560	959	2,447	59%	56%
MINERAL	4,302	2,637	1,921	1,380	2,392	5,938	61%	56%
MISSOULA	115,881	85,308	71,086	46,772	77,165	203,166	74%	67%
MUSSELSHELL	4,458	1,742	1,417	787	1,618	3,946	39%	36%
PARK	15,969	11,221	8,734	5,614	9,665	25,569	70%	61%
PETROLEUM	483	165	143	88	155	396	34%	32%
PHILLIPS	3,675	1,911	1,466	978	1,774	4,355	52%	48%
PONDERA	5,389	3,571	2,800	1,631	3,180	8,002	66%	59%
POWDER RIVER	1,588	503	410	220	467	1,133	32%	29%
POWELL	6,534	4,240	3,170	2,085	3,961	9,495	65%	61%
PRAIRIE	994	468	418	271	442	1,157	47%	44%
RAVALLI	42,972	24,613	19,846	13,741	22,255	58,200	57%	52%
RICHLAND	10,310	4,513	3,578	1,989	4,269	10,080	44%	41%
ROOSEVELT	9,918	5,789	4,355	2,399	5,146	12,543	58%	52%
ROSEBUD	8,160	5,464	4,364	2,419	4,889	12,247	67%	60%
SANDERS	11,641	5,069	4,213	2,584	4,519	11,866	44%	39%
SHERIDAN	3,075	1,934	1,713	1,117	1,846	4,764	63%	60%
SILVER BOW	33,267	23,930	20,501	13,181	21,868	57,612	72%	66%
STILLWATER	9,451	4,371	3,468	2,317	4,025	10,156	46%	43%
SWEET GRASS	3,523	1,711	1,325	934	1,551	3,970	49%	44%
TETON	5,819	3,128	2,209	1,417	2,661	6,754	54%	46%
TOOLE	4,391	2,353	1,773	898	2,198	5,024	54%	50%
TREASURE	623	429	296	183	319	908	69%	51%
VALLEY	6,931	3,407	2,757	1,835	3,223	7,999	49%	47%
WHEATLAND	2,035	807	698	443	753	1,948	40%	37%
WIBAUX	898	358	302	148	311	808	40%	35%
YELLOWSTONE	153,378	93,074	77,462	44,423	83,803	214,959	61%	55%
MONTANA	**1,020,663**	**634,421**	**513,024**	**315,744**	**563,850**	**1,463,189**	**62%**	**55%**